Koch, Kristine

From: Sheldrake, Sean

Sent: Thursday, May 15, 2014 1:55 PM Jennifer Woronets; Koch, Kristine

Cc: Jim McKenna (jim.mckenna@verdantllc.com); Carl Stivers; Amanda Shellenberger; Bob

Wyatt; Patty Dost; John Verduin; King, Todd W. RE: LWG Action Items on T4 CDF Information

Attachments: CDF Follow Up Information 051414.pdf

Jim, Bob, Carl,

Subject:

Thank you for this information per our meeting on 5/8. EPA has a few additional questions, some of which were discussed at our meeting:

CDF specific:

- 1. Need more detail on GAC cost of \$16m (i.e. basis of choice of 0.1% when mixing directly with sediment vs. the range used for PRB of 0.1 to 1%, e.g. why not a range of application % for direct treatment?, likely unit cost based on x, etc.)
- 2. Water treatment of overflow weir costs are needed (as needed, primarily for solids provided GAC direct sediment treatment is used) cost needed.
- 3. Defining which alternatives the CDF would be attached to (deferred until optimized alternative development) based on likely fill volumes/acceptance, assumed % necessary to initiate construction (e.g. 150% of CDF capacity/acceptable wastes to be dredged is the target to attach the CDF to an optimized alternative)—open item.
- 4. Has air monitoring been included (reference)? If not, need to add to construction monitoring cost line item.
- 5. Need placeholder costs for interim closure thin layer sand caps (specific reference).
- 6. It would be helpful to know the circumstances of the CDF failure referenced in this week's KOIN6 article: http://koin.com/2014/05/13/fears-willamette-waste-response-coming-boil/ relative to whether the CDF concept in current consideration for the FS with its associated performance standards has addressed these issues to some degree in the 60% design. To my knowledge, this story wasn't fully appreciated during our T4 design process.

Related comparative items:

- 1. Cost of onsite vs offsite transload facilities needed and assumed production rates (the same or different from T4 transload rate)—please provide reference in the FS.
- 2. Need to include costs of barging vs rail-please provide reference in the FS.

Please advise whether LWG can provide such information, or whether EPA should look into these items in part or as a whole separately. We're also happy to answer questions on the above items.

Thank you.

S

Sean Sheldrake, Unit Diving Officer, RPM EPA Region 10, 1200 Sixth Ave., Suite 900 Seattle, WA 98101 206.553.1220 desk 206.225.6528 cell

http://yosemite.epa.gov/r10/cleanup.nsf/sites/ptldharbor

http://www.epa.gov/region10/dive/

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From: Jennifer Woronets [mailto:jworonets@anchorqea.com]

Sent: Wednesday, May 14, 2014 1:33 PM

To: Koch, Kristine

Cc: Jennifer Woronets; Jim McKenna (jim.mckenna@verdantllc.com); Carl Stivers; Amanda Shellenberger; Bob Wyatt;

Patty Dost; John Verduin; Sheldrake, Sean; King, Todd W. **Subject:** FW: LWG Action Items on T4 CDF Information

Kristine,

Please see below and attached from Carl.

Let us know if you have any questions.

Thank you, Jen Woronets © Anchor QEA, LLC jworonets@anchorqea.com 421 SW Sixth Avenue, Suite 750 Portland, OR 97204 503-972-5014

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From: Carl Stivers

Sent: Wednesday, May 14, 2014 1:29 PM

To: Jennifer Woronets

Cc: Jim McKenna (jim.mckenna@verdantllc.com); Bob Wyatt; Patty Dost; Amanda Shellenberger; John Verduin

Subject: LWG Action Items on T4 CDF Information

Kristine – Please find attached information responding to EPA's May 8 meeting requests for information from the T4 CDF Design documents. The Port was involved in the preparation of this information. This information is relevant to the following action items noted in our May 9, 2014 action items lists:

- 1. EPA and LWG review sediment treatment discussion in T4 Design. LWG (Port) summarize the assumptions of the example and costs associated with sediment treatment and provide to EPA.
- 2. LWG (Port) summarize sections of T4 Design that discuss water treatment and provide to EPA.
- 3. LWG (Port) summarize CDF loading rates from T4 Design and compare to range of reasonable dredging production rates to reconcile potential water overflow at T4 CDF and provide to EPA.

Please let me know if vo	ou have any questions.
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Thanks.

Carl

Carl Stivers

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